Chapter 4 Implementing the Plan

4.1 Project Development Process

The project development process usually begins after a transportation need has been identified. The project initiation document (PID) starts the process leading to the programming of funds. The process ends upon completion of the construction project. Figure 4.1 delineates the project development process.

The project development process is tied to the legal requirements of environmental laws and regulations, and it melds engineering requirements with local and regional plans.

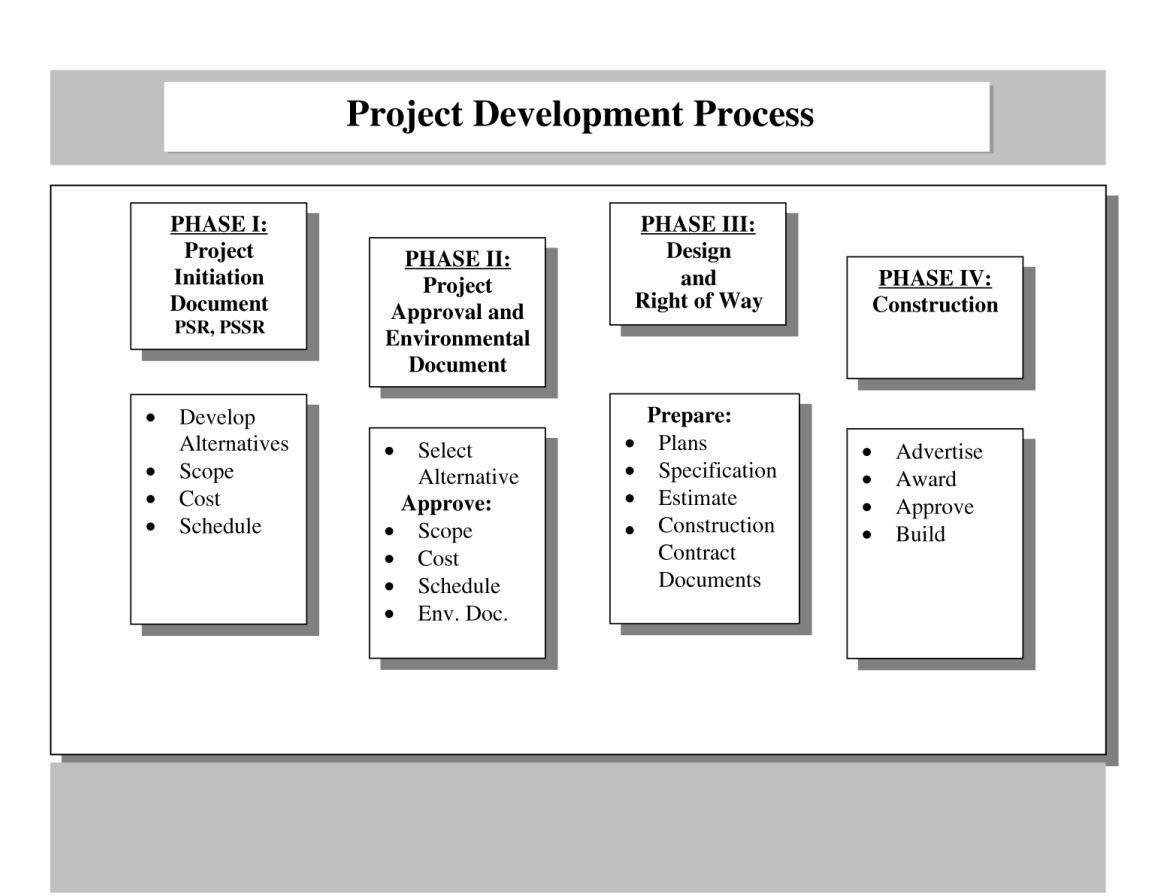

Figure 4.1 Project Development Process

Project Initiation

The Project Initiation Document (PID) will either be a Project Study Report (PSR) for added travel capacity projects, or a Project Scope Summary Report (PSSR) for roadway rehabilitation and operational projects. The PIDs provide the purpose and need for an improvement, identify alternatives, and set the schedule and estimated cost of the project. Once the document has been approved, the project can be submitted for programming of funds.

To properly identify aesthetic elements of interest to a community, a community corridor beautification plan should be developed so it can be referenced by the *Route 99 Corridor Enhancement Master Plan*. The *Route 99 Corridor Enhancement Master Plan* will track existing plans and add new plans as they are completed. It will also aid roadway designers in preparation of a PID.

Project Approval and Environmental Document

Preliminary engineering studies and an environmental document are prepared to assure that a project complies with State and federal environmental laws. All project activities such as the development of project alternatives, public input, and selection of the Preferred Alternative are discussed in the Final Environmental Document (FED).

Selection of the Preferred Alternative occurs only after specific effects and reasonable mitigation measures have been identified for each alternative. The selection is made after comments are received from circulation of the Draft Environmental Document (DED) for public comment and from the public hearing process. These comments and the rationale for selecting the alternative are detailed in the Final Environmental Document and summarized in the Project Report (PR).

Selection of the Preferred Alternative authorizes final design to begin. The PR documents Caltrans' approval for most types of State highway projects. This includes new facilities, as well as improvements, modifications, or repairs to existing facilities—whether done by Caltrans or by others under a Caltrans encroachment permit. "Project Approval" means approval by Caltrans, and where required, approval by the Federal Highways Administration and the California Transportation Commission. A Record of Decision provides the final approval of the project's Environmental Document.

It is very difficult to change the scope of the project once the PR has been approved. Changes to the project may cause a re-evaluation of the environmental document and require additional funds. Such changes may result in the demise of the project. Items such as aesthetic features would likely not be added after this phase if it meant that the project would be delayed, canceled, or the cost increased.

Design and Right-of-Way

The design and right-of-way phase involves the preparation of Plans, Specifications, and Estimates (PS&E) for the construction of a transportation improvement project, and the acquisition of the right-of-way necessary to build the project. Because the development of estimates and final design alternatives is required for project approval, a significant portion of the project design is often completed before the formal initiation of the design phase. These activities are known as preliminary engineering.

The responsibilities during this phase of the project development process include the following:

- Prepare quality plans that meet Caltrans standards, practices, and policies.
- Prepare project cost estimates and monitor costs to keep the project within budget.
- Purchase right-of-way and relocate utilities if needed.
- Monitor the project scope to ensure consistency with previous approvals.
- Prepare final construction contract documents.

Construction

Advertising the construction contract is the first step in the construction phase. The contract is awarded to the lowest qualified bidder, provided that all procedures and legal requirements have been fulfilled. The contract is then approved, the contractor is notified, and the start of actual construction soon follows. Once the contract has been approved, there will be limited changes to the project. Upon completion of construction, the Resident Engineer recommends acceptance of the contract. With the exception of enhanced planting, gateway monuments, community identifiers, and highway art, maintenance of the facility typically reverts back to Caltrans following contract acceptance.

Local agency officials are continuously involved in the process, particularly for those projects financed or constructed by the local agencies. Acceptance rests with the State, however, for the portion of the project that is within the State right-of-way. When the contract includes work on local agency facilities, the local agency officials must be involved in the acceptance reviews.

4.2 Sample Project Timelines

There are two different classifications of projects that are being proposed in this Business Plan. Their approximate timelines, in relation to each other, appear in Figure 4.2:

- Negative Declaration (ND)/Finding of No Significant Impact (FONSI): This is the shorter of the two timelines because it is a less complex environmental document that requires less time to complete and usually is not subject to the same level of public scrutiny as a higher level document would be. Therefore, the total project time for an ND/FONSI is four to nine years.

- Environmental Impact Report (EIR) / Environmental Impact Statement (EIS): This is the more complex and therefore longer of the two project types. It usually addresses projects that have a greater effect on the environment and therefore receives a great amount of public input. The average timeframe for this project is nine to 14 years.

There is a third classification of transportation improvement project. Categorical exclusion/exemption (CE) projects typically have a simple scope and have limited environmental impacts which are excluded or exempt from consideration by law, and they can be delivered in a much shorter timeframe than an ND or EIR. While there are CE projects on the Route 99 corridor, they are typically SHOPP projects and not the type of project covered in this Business Plan.

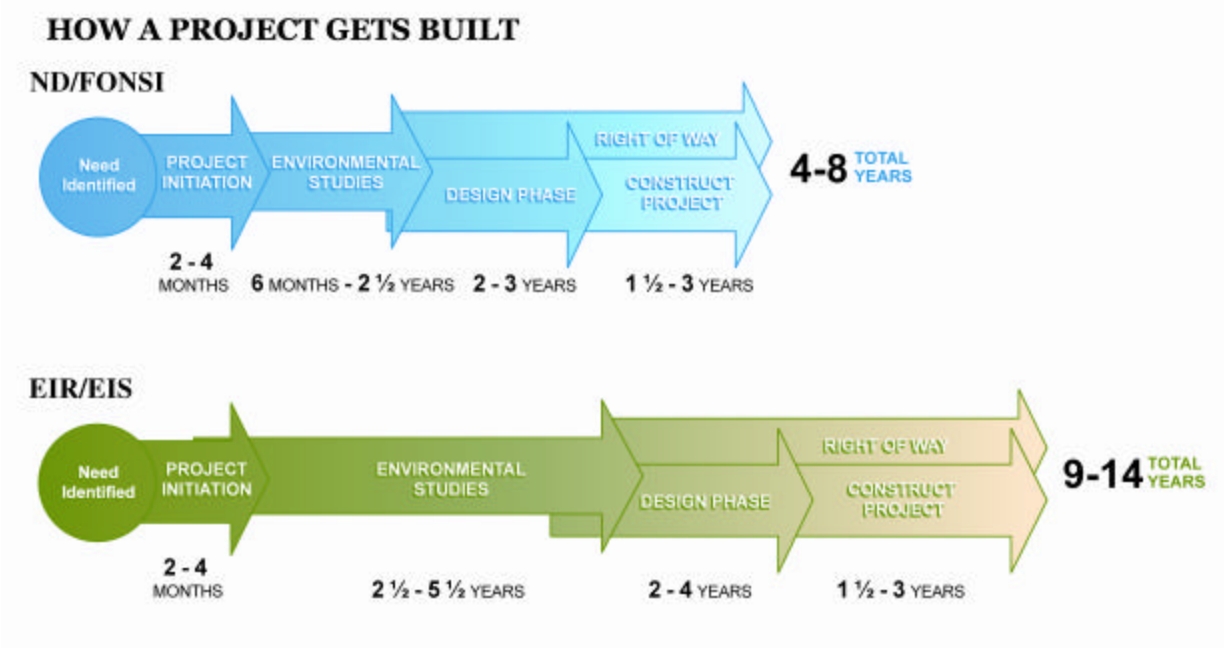

Figure 4.2 Project Development Timeline

4.3 Phasing of Projects

A consideration of phasing of the projects is critical to the successful completion of work on the Route 99 corridor. If all six billion dollars were allocated at one time, it would be impossible for Caltrans to complete the projects any faster than if they were allocated over a 20-year period. This section will discuss what Caltrans thinks would be the most successful and efficient way to allocate and expend all of the funding necessary to construct these projects.

Until this point, all dollars discussed have been in 2005 dollars. With the discussion of phasing, the issue of inflation must also be addressed. While a range of three to seven percent was discussed as possible rates of inflation, a more reasonable five percent was decided upon to illustrate what the overall cost of projects, by year, might look like over a 20-year period. As illustrated in Figure 4.3, Caltrans estimates it will take approximately 5 years to "ramp up" in order to accommodate the increased amount of workload planned for all phases. Starting in year five, the constant allocation of dollars would be approximately $333 million per year for the life of the plan (in 2005 dollars). When inflation is calculated into this equation, each subsequent year demands additional funds, finally topping out at approximately $884 million in year 20.

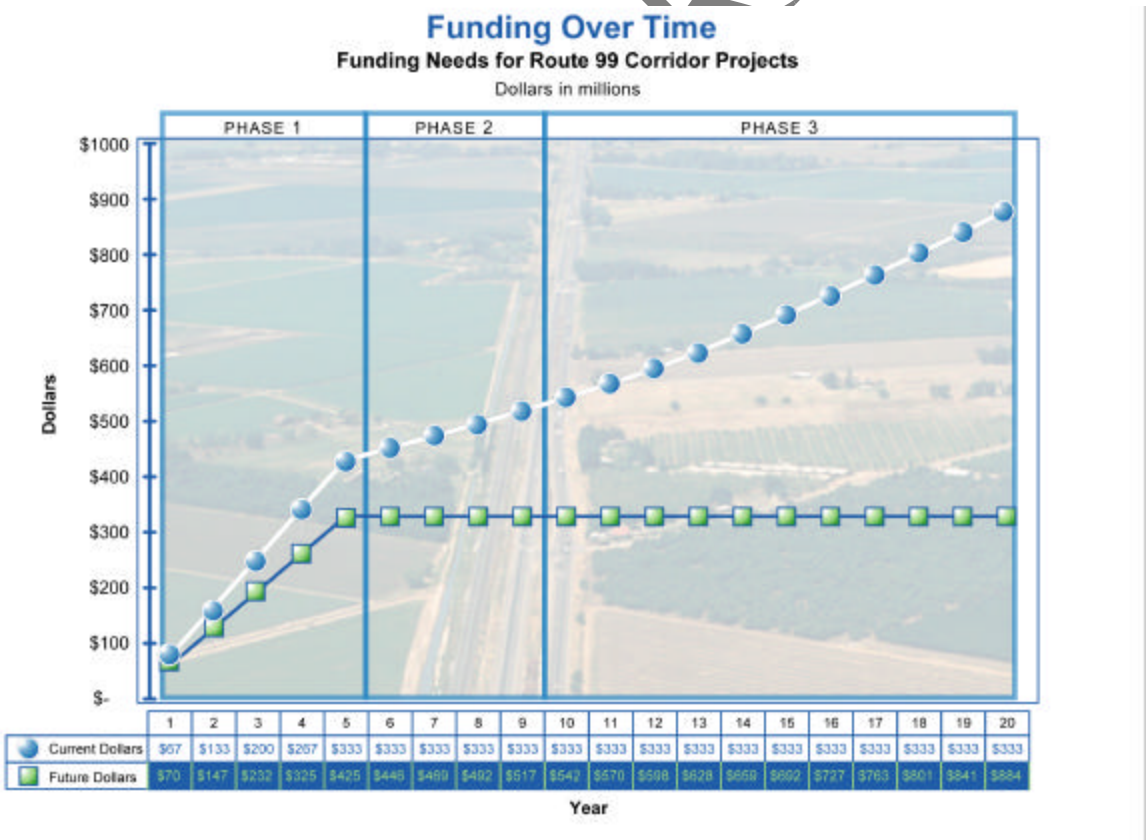

Figure 4.3 Route 99 Funding Needs

Figure 4.3 not only identifies the effect time has on the cost of projects, it also asks the question, "Can Caltrans and the construction industry reach and sustain an annual construction program on the route of $330 million per year for 15 years?" This year (fiscal year 2005/2006), Caltrans will have about $200 million in STIP projects under construction. This has occurred during a fiscally constrained period. It seems reasonable to assume that without fiscal constraint, a $330 million program is achievable.

Sustaining this level of delivery could present challenges to Caltrans and the construction industry. Further, since most of these projects will take two or more years to build, this would result in approximately $700 million of ongoing construction on the route every year. This could create traffic control–traffic management issues

Implementation of this plan has been broken down into three phases; Phase 1, the first billion dollars; Phase 2, the next two billion dollars; and Phase 3, the last three billion dollars. Figure 4.4 shows the route as exists today. Figures 4.5, 4.6, and 4.7 show the route upon completion of each additional phase.

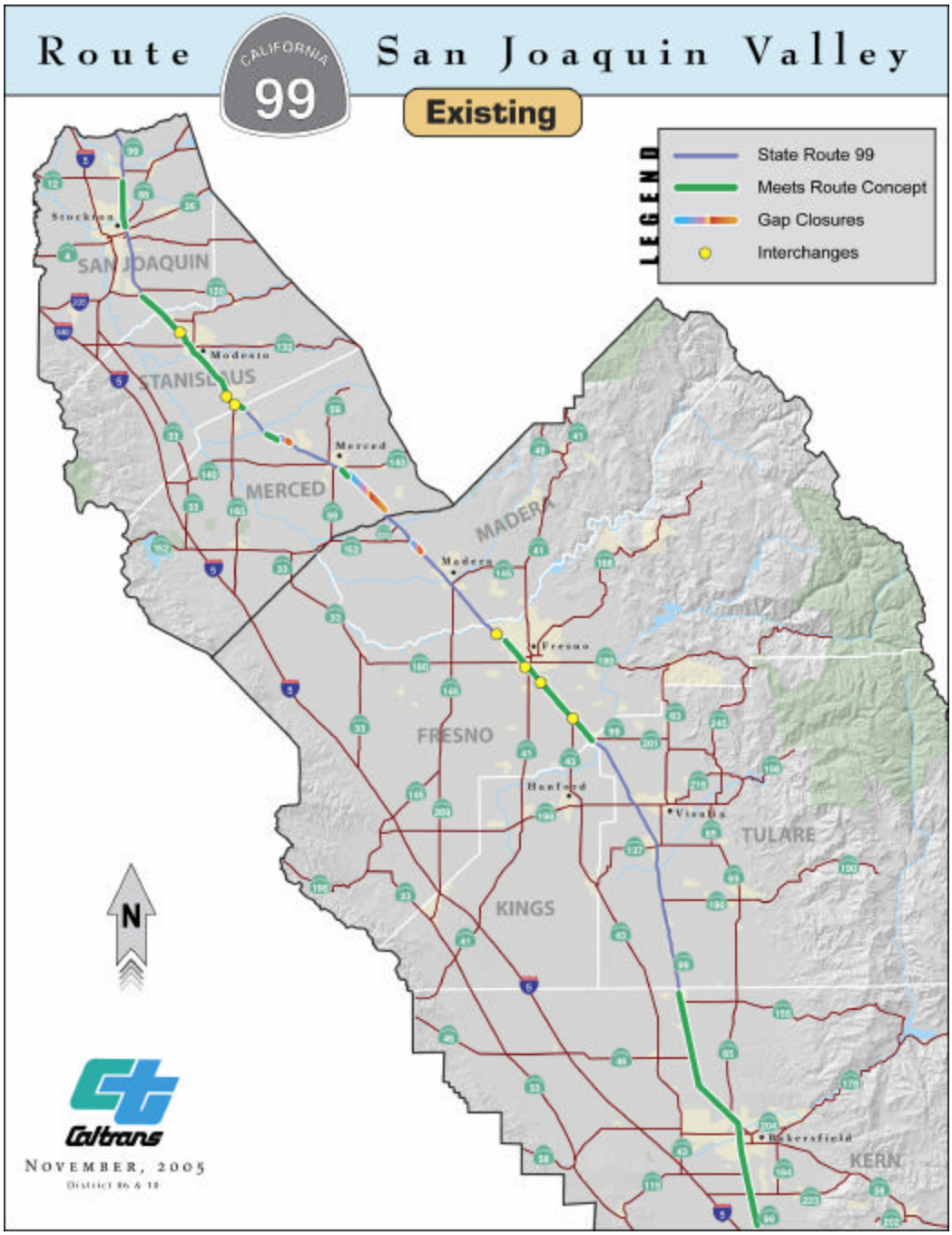

Figure 4.4 Existing Route Concept Compliance Map

4.3.1 –Phase 1

Phase 1 consists of the first billion dollars of funding, and coincides with the list of programmed projects contained in Figure 3.4. Approximately 20 percent of this first billion dollars is currently funded.

Phase 1 is made up of elements of Priority Category 1, Freeway Conversion; Priority Category 2, Capacity-Increasing Projects; and Priority Category 3, Major Operational Improvements. Phase 1 will complete all of Priority Category 1, three Priority Category 2 projects, and six Priority Category 3 projects. While Phase 1 does not complete projects in priority category order, it is prudent to complete the projects that are already in the delivery pipeline. However, as many of the Phase 1 projects are not yet fully funded, opportunity remains to add additional funding to these projects based on the priorities contained in this Business Plan.

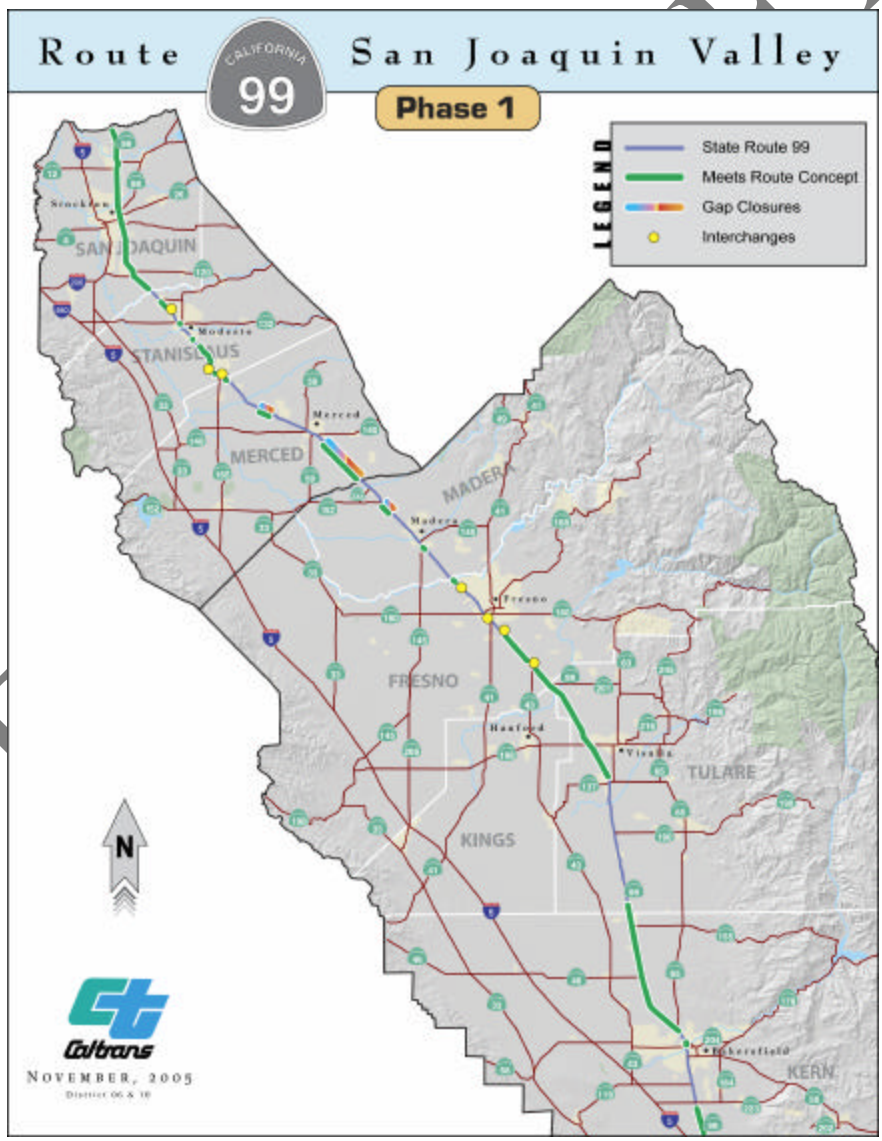

Figure 4.5 Post Phase 1 Route Concept Compliance Map

4.3.2 – Phase 2

Phase 2 allocates $2 billion dollars (current year dollars). With this second allocation, Caltrans would be able to complete the remaining 22 projects listed as Priority Category 2. See Figure 4.6. While it is possible to determine which categories will be fully or partially funded, this document is not intended to prioritize the individual list of projects. It will require extensive negotiations with all of the MPOs to arrive at a final prioritized list of the order in which projects will be funded. This document only seeks to give priority to categories of projects that will allow the decision-makers to arrive at their conclusions with the best available information. By the time Phase 3 begins, Caltrans should be adequately staffed and have the appropriate amount of contracting capacity available to handle this workload. It also seems reasonable to assume the contracting industry would, by this time, have adequate capacity to accomplish this work.

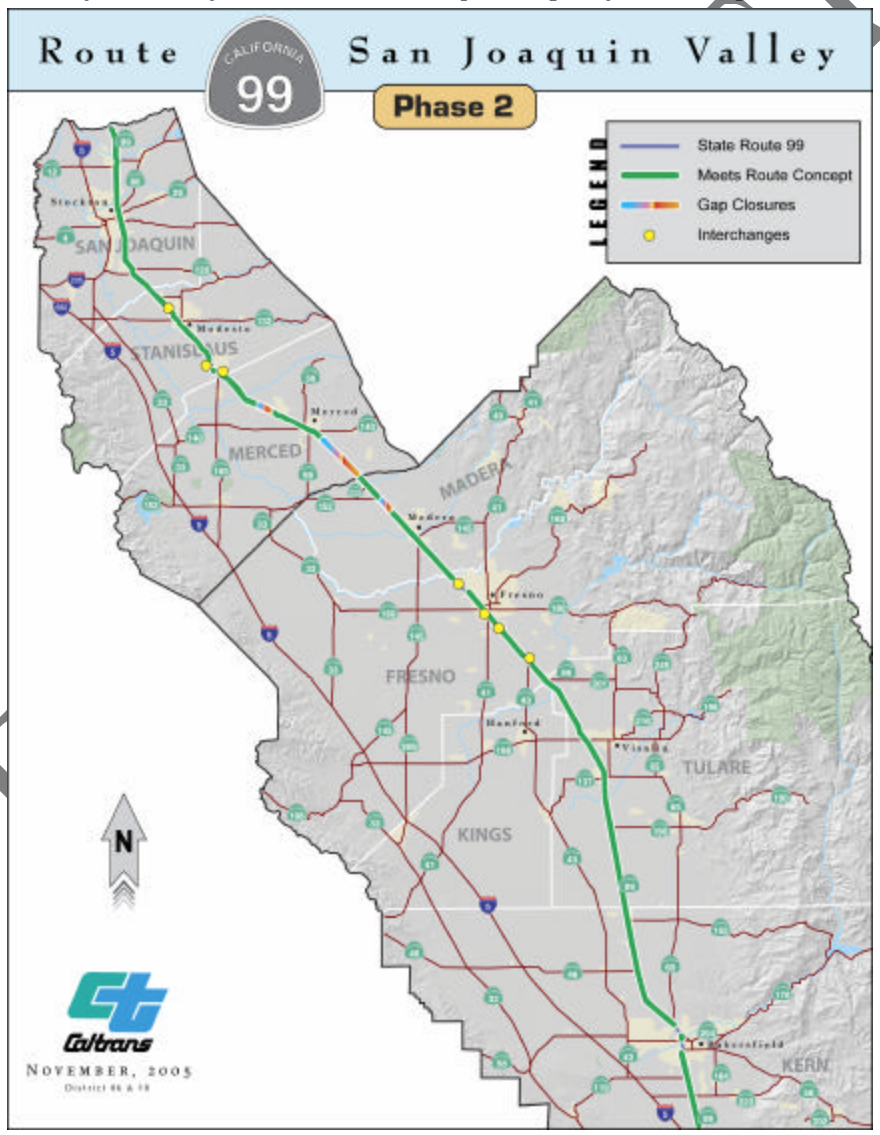

Figure 4.6 Post Phase 2 Route Concept Compliance Map

4.3.3 – Phase 3

The final phase of the Business Plan will be the complete funding of the remaining projects with an allocation of $3 billion. This would fund the remaining 27 projects in Priority Category 3 and all five projects in Priority Category 4. See Figure 4.7. With this last amount of funding, all of the prioritized projects will be fully funded and all identified goals will be met for the Route 99 corridor.

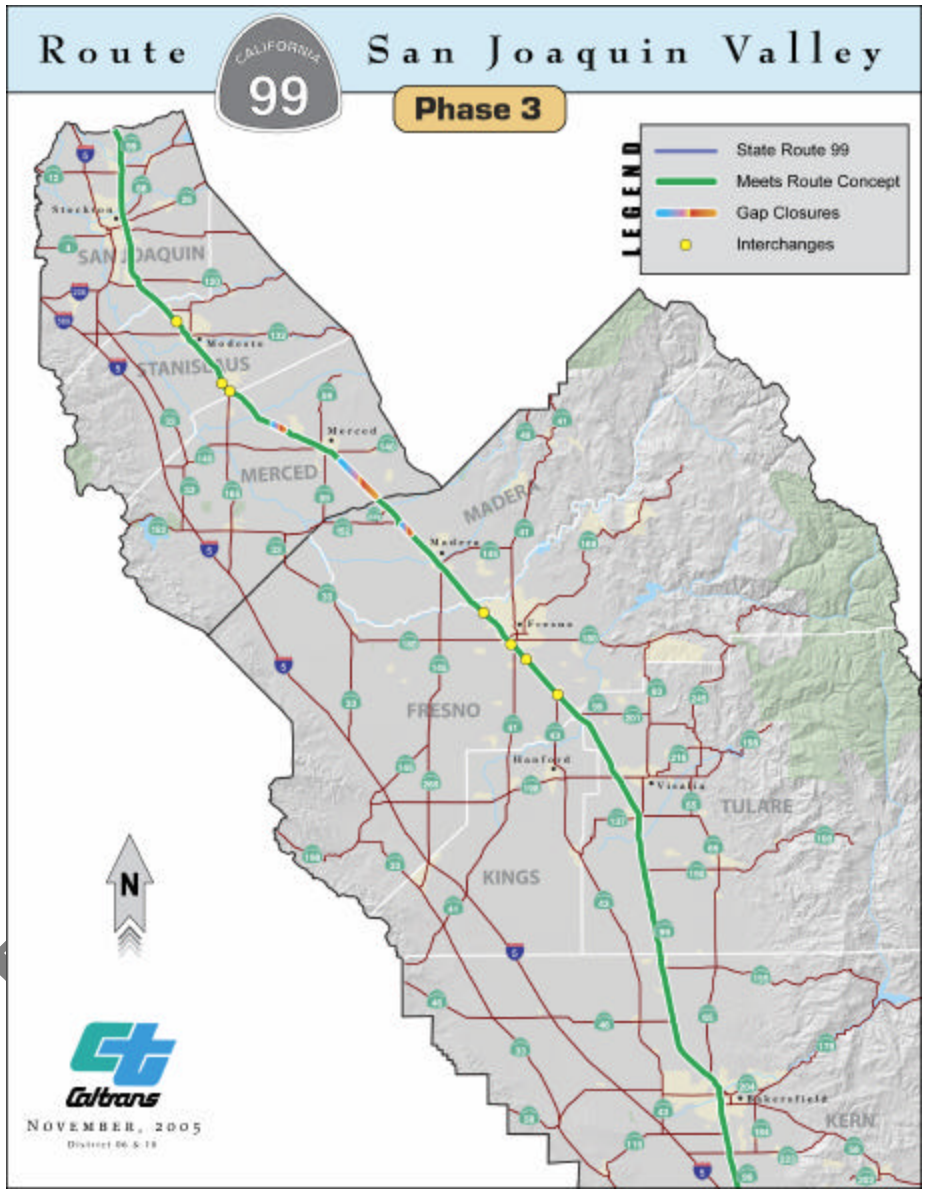

Figure 4.7 Post Phase 3 Route Concept Compliance Map

4.4 - Implementation

As discussed in this chapter, actual implementation of this plan will be influenced by many factors including funding, deliverability, and the ability of Caltrans and the construction industry to "ramp up" to deliver this magnitude of work. In the real world of today's transportation funding, however, it is funding availability that will very likely drive the implementation of this plan.

Phase 1 consists of projects that are either locally funded or programmed in the STIP. While this phase consists of approximately $1 billion in projects, it is only about 20 percent funded, leaving a shortfall of $800 million. The current 2006 STIP Fund Estimate, which is built on the assumption that Proposition 42 funds will be available every year from the current year (2005/06) out, indicates there will not be any significant amount of new funding for ITIP projects. There may be limited capacity to add funds to RTIP projects; however, the 99 corridor is heavily ITIP dependant, especially for Phase 1 and Phase 2. Based on the current funding scenario, and assuming there will be programming capacity in the out years of the 2008 STIP, Phase 1 will not be completed until sometime around 2015.

Again, using the 2006 STIP Fund Estimate, there will be little if any capacity to add new starts to the STIP until at least the 2011/12 fiscal year if ITIP funds are used. It is difficult to predict when Phase 2 might be completed, but clearly if the first Phase 2 project does not begin until 2012, it will not be completed until 2021-2026.

With this much uncertainty in Phase 1 and 2, it is impossible to predict when Phase 3 could even begin. Clearly Caltrans cannot accomplish the goals of this Business Plan without alternative funding sources.

Increasing the RTIP funding on the Route 99 corridor is one way to expedite completion of the plan. While this would improve the current funding situation, it would not improve it substantially. Further, the Valley MPOs typically view mainline improvements as primarily the State's responsibility, while they view improvements to interchanges on the route as primarily a local responsibility. This view of funding responsibilities is not necessarily consistent with the priorities established in this Business Plan nor is it always consistent with the rules governing the use of ITIP funds in urban areas. However, even combined, the ITIP and RTIP are woefully inadequate to address the needs on the route as well as the other State routes in this eight-county area.

There has been a local proposal to collect truck tolls on the route to finance these types of improvements. While that proposal is enticing, it does not seem practical. Truck tolls could

possibly be used to build dedicated truck facilities, but those are beyond the scope of the improvements identified in this Business Plan.

Section 3.16.1 describes a number of innovative financing strategies that could assist in expediting the funding of projects on Route 99. However, these strategies deal primarily with advancing future revenues; they do not actually generate additional revenues. Both are required in order to achieve the goals of this Business Plan.

In discussions with the MPOs, it is clear that the region cannot wait 20 years for implementation of this plan. Caltrans agrees that an accelerated program would be prudent and beneficial to the route and the region. Accelerating this effort would compound the issues identified in Section 4.3, but the benefits of an accelerated program far outweigh the risks and should be considered if funding could be made available.

While an accelerated program would challenge Caltrans and the construction industry, Caltrans is willing to accept that challenge. Ongoing efforts to bring the construction industry back to California should help enhance their ability to meet this challenge. Further, strategic scheduling of projects could help minimize the traffic control–traffic management issues associated with a large construction program on the route.